

Name: \_\_\_\_\_

### p1029: Combine Like Terms (v13)

#### Example

Combine like terms.

$$2 - 6x^2 - 2x - 3 + 5x^2 + 4x^2 - 5x - 7x + 9 + 3$$

#### Answer

Combine the quadratic terms.

$$-6x^2 + 5x^2 + 4x^2 \equiv 3x^2$$

Combine the linear terms.

$$-2x - 5x - 7x \equiv -14x$$

Combine the constant terms.

$$2 - 3 + 9 + 3 \equiv 11$$

The final result:

$$3x^2 - 14x + 11$$

---

#### Question 1

Combine like terms.

$$3x + x - 4x^2 + 5x - 3x^2 + 6x^2 - 8 - 9 - 1 + 8$$

$$-x^2 + 9x - 10$$

**Question 2**

Combine like terms.

$$-9 + 9 - 3x + 6x^2 + 5x + 3x^2 - 7 - 4x^2 - 2x - x$$

$$5x^2 - x - 7$$

**Question 3**

Combine like terms.

$$5x^2 - 1 - 6 - 7x^2 - 5 + 9x + 8x - 4x + 6x^2 - 9$$

$$4x^2 + 13x - 21$$

**Question 4**

Combine like terms.

$$-8 + 9x^2 - 4 + 6x - 5x^2 - 7x - 6x + 8x^2 - 1 + 4x^2$$

$$16x^2 - 7x - 13$$